### **Environmental Protection Agency**

manufacturer generating credits for deposit only in the complete heavy-duty vehicle banking program to submit their end-of-year reports in the applicable specified time period (*i.e.*, 90 days after the end of the model year) shall result in the credits not being available for use until such reports are received and reviewed by EPA. Use of projected credits pending EPA review will not be permitted in these circumstances.

- (l) Quarterly records. Any manufacturer producing a test group participating in trading using reserved credits, shall maintain the following records on a quarterly basis for each test group in the trading subclass:
  - (1) The test group;
  - (2) The averaging set;
- (3) The actual quarterly and cumulative U.S. production volumes excluding vehicles produced for sale in California:
- (4) The values required to calculate credits as given in paragraph (c) of this section:
- (5) The resulting type and number of credits generated/required;
- (6) How and where credit surpluses are dispersed; and
- (7) How and through what means credit deficits are met.
- (m) Additional flexibility for complete heavy-duty vehicles. If a complete heavy-duty vehicle has a  $NO_X$  FEL of 0.6 grams per mile or lower, a discount of 1.0 may be used in the trading and banking credits calculation for  $NO_X$  described in paragraph (c)(2) of this section.
- (n) Early banking for complete heavyduty vehicles. Provisions set forth in paragraphs (a) through (m) of this section apply except as specifically stated otherwise in this paragraph (n).
- (1) Early banking eligibility. To be eligible for the early banking program described in this paragraph, the following must apply:
- (i) Credits are generated from complete heavy-duty vehicles.
- (ii) During certification, the manufacturer shall declare its intent to include specific test groups in the early banking program described in this paragraph (n).
- (2) Credit generation and use. (i) Early credits may be generated by test groups starting in model year 2000.

- (ii) Credits may only be used for complete heavy-duty vehicles subject to chassis-based standards, except as provided by paragraph (o) in this section, and all credits shall be subject to discounting and all other provisions contained in paragraphs (a) through (m) of this section.
- (o) Credit transfers. A manufacturer that elects to comply with Option 1 or 2 contained in §86.005-10(f) may transfer credits between its complete vehicle averaging set and its heavy-duty Otto-cycle engine averaging set as follows:
- (1) Credits earned in model years 2004 (2003 for Option 1) through 2007 are eligible to be transferred.
- (2) Transferred credits may not be banked for use in model years 2008 and later. Credits that are transferred but not used prior to model year 2008 must be forfeited.
- (3) Prior to transferring credits, a manufacturer must develop a methodology to transfer the credits including a conversion factor that may be used to convert between chassis-based credits (derived on a grams per mile basis) and equivalent engine-based credits (derived on a grams per brake horse-power-hour basis). The methodology must be approved by EPA prior to the start of the model year in which the credits are to be transferred. The conversion factor must provide reasonable certainty that the credits are equivalent for the specific vehicle test group(s) and engine family(s) involved in the generation and use of the cred-

[65 FR 59971, Oct. 6, 2000]

# §86.1817-08 Complete heavy-duty vehicle averaging, trading, and banking program.

Section 86.1817-08 includes text that specifies requirements that differ from \$86.1817-05. Where a paragraph in \$86.1817-05 is identical and applicable to \$86.1817-08, this may be indicated by specifying the corresponding paragraph and the statement "[Reserved]. For guidance see \$86.1817-05."

- (a) through (o) [Reserved]. For guidance see §86.1817-05.
- (p) The following provisions apply for model year 2008 and later engines. These provisions apply instead of the

#### §§ 86.1818-86.1819

provisions of paragraphs §86.1817-05 (a) through (o) to the extent that they are in conflict.

(1) Manufacturers of Otto-cycle vehicles may participate in an NMHC averaging, banking and trading program to show compliance with the standards specified in §86.1806-08. The generation and use of NMHC credits are subject to the same provisions in paragraphs §86.1817-05 (a) through (o) that apply for NO<sub>X</sub> credits, except as otherwise

specified in this section.

- (2) NO<sub>X</sub> or NMHC (or NO<sub>X</sub> plus NMHC) credits may be exchanged between heavy-duty Otto-cycle test groups certified to the engine standards of subpart A of this part and heavy-duty Otto-cycle test groups certified to the chassis standards of this subpart, subject to an 0.8 discount factor (e.g., 100 grams of NO<sub>X</sub> credits generated from vehicles would be equivalent to 80 grams of NO<sub>x</sub> credits if they are used in the engine program of subpart A of this part, and vice versa). Credits that were previously discounted when they were banked according to §86.1817-05(c), are subject to an additional discount factor of 0.888 instead of the 0.8 discount factor otherwise required by this paragraph (p)(2). This results in a total discount of 0.8  $(0.9 \times 0.888 = 0.8)$ .
- (3) Credits are to be rounded to the nearest one-hundredth of a Megagram.
- (4) To calculate credits relative to the  $NO_X$  standards listed in §86.1816–08 (a)(1)(iv)(A) or (a)(2)(iv)(A) (0.2 or 0.4 grams per mile, respectively) express the standard and FEL to the nearest one-hundredth of a gram per mile prior to calculating the credits. Thus, either 0.20 or 0.40 should be used as the value for "Std".
- (5) Credits generated for 2008 and later model year test groups are not discounted (except as specified in  $\S 86.1817-05(c)$  and paragraph (p)(2) of this section), and do not expire.
- (6) For the purpose of using or generating credits during a phase-in of new standards, a manufacturer may elect to split an test group into two subgroups: one which uses credits and one which generates credits. The manufacturer must indicate in the application for certification that the test group is to be split, and may assign the numbers and configurations of vehicles within

the respective subfamilies at any time prior to the submission of the end-of-year report described in §86.1817–05 (i)(3). Manufacturers certifying a split test group may label all of the vehicles within that test group with the same FELs: either with a NO<sub>X</sub> FEL and an NMHC FEL, or with a single NO<sub>X</sub>+NMHC FEL. The FEL(s) on the label will apply for all SEA or other compliance testing.

(7) Vehicles meeting all of the applicable standards of \$86.1816-08 prior to model year 2008 may generate NMHC credits for use by 2008 or later test groups. Credits are calculated according to \$86.1817-05(c), except that the applicable FEL cap listed in \$86.1816-08(a)(1)(ii)(B) or (2)(ii)(B) applies instead of "Std" (the applicable standard).

[66 FR 5192, Jan. 18, 2001]

#### §§ 86.1818-86.1819 [Reserved]

## §86.1820-01 Durability group determination.

This section applies to the grouping of vehicles into durability groups. Manufacturers shall divide their product line into durability groups based on the following criteria:

(a) The vehicles covered by a certification application shall be divided into groups of vehicles which are expected to have similar emission deterioration and emission component durability characteristics throughout their useful life. Manufacturers shall use good engineering judgment in dividing their vehicles into durability groups. Such groups of vehicles are defined as durability groups.

bility groups.
(b) To be included in the same durability group, vehicles must be identical in all the respects listed in paragraphs (b) (1) through (7) of this section:

- (1) Combustion cycle (e.g., two stroke, four stroke, Otto cycle, diesel cycle).
- (2) Engine type (e.g., piston, rotary, turbine, air cooled versus water cooled).
- (3) Fuel used (e.g., gasoline, diesel, methanol, ethanol, CNG, LPG, flexible fuels)
- (4) Basic fuel metering system (e.g., throttle body injection, port injection (including central port injection), carburetor, CNG mixer unit).